Photographic Science and Engineering

Volume 2—June, August, October, December 1958

TITLE INDEX

Analysis of the Variability Among Density-Log Exposure Curves of Black-and-White Negative Films by the Method of Principal Components
J. L. Simonds No. 4, p. 205

Analytical Recording Densitometer
W. E. White and C. A. Morrison No. 3, p. 164

Apparatus and a Laboratory for Processing Thick Nuclear Track Emulsions
John F. Garfield No. 2, p. 85

Book Reviews
Microphotography, by G. W. W. Stevens, reviewed by Frank Smith No. 3, p. 177
Concepts of Classical Optics, by John Strong, reviewed by E. K. Kaprelian No. 3, p. 177
Photographic Sensitivity, Tokyo Symposium, reviewed by T. H. James No. 4, p. 234
Detection and Measurement of Infrared Radiation, by Smith, Jones, and Chasmar, reviewed by E. K. Kaprelian No. 4, p. 234
Reproduction of Colour, by R. W. G. Hunt, reviewed by E. K. Kaprelian No. 4, p. 235

Clerc, Louis-Philippe (a citation)
Walter Clark No. 4, p. 185

Color Response of Current Amateur Reversal Color Films to Three Electronic Flash Units
R. E. Grimm No. 1, p. 40

Combined Development and Fixation of Photographic Images with Monobaths
Marilyn Levy No. 3, p. 136

Continuous Rapid-Processing System for Side-Looking Radar Mapping
Edgar D. Seymour No. 2, p. 91

Degradation of Phenidone in Developer Solutions During Storage
G. C. Alletag No. 4, p. 213

Evaluation of the Crabtree-Ross Procedure for Residual Hypo in Processed Film
E. P. Przybylowicz, C. W. Zuehlke, and A. E. Ballard No. 3, p. 148

Evaluation of Optical Images
George C. Higgins and Fred H. Perrin No. 2, p. 66

Influence of Observer Adaptation on the Acceptance of Color Prints
C. J. Bartleson No. 1, p. 32

Internal Gelatin in Photographic Silver Halide Grains
A. E. Ballard, C. W. Zuehlke, and R. S. Miller No. 4, p. 186
Note, P. Davis No. 4, p. 190

Japanese Photographic Objectives for Use with 35mm Cameras
Kogoro Yamada No. 1, p. 6

Measurement of the Ratio of Lateral to Vertical Dye Diffusion Rates in Swollen Gelatin Coatings
R. B. Pontius and J. A. Wenrich No. 3, p. 131

Minimum Energy Detectable by Photographic Materials
R. Clark Jones
Part II. Results for Four Current Kodak Films No. 4, p. 191
Part III. Energy Incident on a Microscopic Area of the Film No. 4, p. 198

Moisture in Photographic Film and Its Measurement
E. K. Colton and E. J. Wiegand No. 3, p. 170

Neutral Image Tones with Kodak High Resolution Plates
J. H. Altman and R. L. Lamberts No. 3, p. 160

Notes from the Editor
Peter Krause No. 2, p. 119

Patent Postscripts
Robert H. Zappert No. 1, p. 55; No. 2, p. 120

Photographic Emulsions for Missile Photography
Hutson K. Howell No. 2, p. 95

Photographic Exposure Guides and Meters
E. P. Wightman
Part I — Introduction No. 1, p. 14
Part II — Exposure Tables, Charts, and Calculators No. 1, p. 19

Photographic Techniques in Radar Meteorology
Myron G. H. Ligda and James D. Sullivan No. 1, p. 1

Production of Precision Resolving Power Test Reticles
P. Hariharan No. 2, p. 77

Photographic Science and Engineering

Volume 2—June, August, October, December 1958

TITLE INDEX

Analysis of the Variability Among Density-Log Exposure Curves of Black-and-White Negative Films by the Method of Principal Components
J. L. Simonds No. 4, p. 205

Analytical Recording Densitometer
W. E. White and C. A. Morrison No. 3, p. 164

Apparatus and a Laboratory for Processing Thick Nuclear Track Emulsions
John F. Garfield No. 2, p. 85

Book Reviews
Microphotography, by G. W. W. Stevens, reviewed by Frank Smith No. 3, p. 177
Concepts of Classical Optics, by John Strong, reviewed by E. K. Kaprelian No. 3, p. 177
Photographic Sensitivity, Tokyo Symposium, reviewed by T. H. James No. 4, p. 234
Detection and Measurement of Infrared Radiation, by Smith, Jones, and Chasmar, reviewed by E. K. Kaprelian No. 4, p. 234
Reproduction of Colour, by R. W. G. Hunt, reviewed by E. K. Kaprelian No. 4, p. 235

Clerc, Louis-Philippe (a citation)
Walter Clark No. 4, p. 185

Color Response of Current Amateur Reversal Color Films to Three Electronic Flash Units
R. E. Grimm No. 1, p. 40

Combined Development and Fixation of Photographic Images with Monobaths
Marilyn Levy No. 3, p. 136

Continuous Rapid-Processing System for Side-Looking Radar Mapping
Edgar D. Seymour No. 2, p. 91

Degradation of Phenidone in Developer Solutions During Storage
G. C. Alletag No. 4, p. 213

Evaluation of the Crabtree-Ross Procedure for Residual Hypo in Processed Film
E. P. Przybylowicz, C. W. Zuehlke, and A. E. Ballard No. 3, p. 148

Evaluation of Optical Images
George C. Higgins and Fred H. Perrin No. 2, p. 66

Influence of Observer Adaptation on the Acceptance of Color Prints
C. J. Bartleson No. 1, p. 32

Internal Gelatin in Photographic Silver Halide Grains
A. E. Ballard, C. W. Zuehlke, and R. S. Miller No. 4, p. 186
Note, P. Davis No. 4, p. 190

Japanese Photographic Objectives for Use with 35mm Cameras
Kogoro Yamada No. 1, p. 6

Measurement of the Ratio of Lateral to Vertical Dye Diffusion Rates in Swollen Gelatin Coatings
R. B. Pontius and J. A. Wenrich No. 3, p. 131

Minimum Energy Detectable by Photographic Materials
R. Clark Jones
Part II. Results for Four Current Kodak Films No. 4, p. 191
Part III. Energy Incident on a Microscopic Area of the Film No. 4, p. 198

Moisture in Photographic Film and Its Measurement
E. K. Colton and E. J. Wiegand No. 3, p. 170

Neutral Image Tones with Kodak High Resolution Plates
J. H. Altman and R. L. Lamberts No. 3, p. 160

Notes from the Editor
Peter Krause No. 2, p. 119

Patent Postscripts
Robert H. Zappert No. 1, p. 55; No. 2, p. 120

Photographic Emulsions for Missile Photography
Hutson K. Howell No. 2, p. 95

Photographic Exposure Guides and Meters
E. P. Wightman
Part I — Introduction No. 1, p. 14
Part II — Exposure Tables, Charts, and Calculators No. 1, p. 19

Photographic Techniques in Radar Meteorology
Myron G. H. Ligda and James D. Sullivan No. 1, p. 1

Production of Precision Resolving Power Test Reticles
P. Hariharan No. 2, p. 77

Projection of Photographic Data Recording Two-Tenths Second After Exposure
CARL ORLANDO No. 3, p. 142

Quantitative Estimation of Photographic Kink Susceptibility
BEAT MEERKÄMPER No. 4, p. 231

Quantum Efficiency of Photographic Negatives
R. CLARK JONES No. 2, p. 57

Relation Between Accelerating and Retarding Tendencies of Some Active Substances in Physical Ripening of Silver Chloride Suspensions
YASUSHI OH-YAMA AND KIYOSHI FUTAKI No. 3, p. 128

Revision of the Relation Between American Standard Exposure Index and DIN Speed Resulting from a Recent Revision of the German DIN 4512 Standard
J. L. SIMONDS No. 3, p. 162

Sensitization of Mercurous Oxalate by Dyes
P. A. VAN DER MEULEN AND ROBERT H. BRILL No. 3, p. 121

Sensitometric Processing Machine Using Small Film Strips and Small Developer Volume
R. W. HENN AND K. R. HUGHES No. 2, p. 81

Some Simplified Shutter, Flash Synchronization, and Motion-Picture Camera Tests
SAMUEL L. LOVE No. 4, p. 219

System Analysis and Performance of a Feedback Scanning Printer
L. L. BLACKMER AND J. C. MARCHANT No. 4, p. 225

Technicalia Photographica
FRANK SMITH No. 1, p. 43; No. 2, p. 105; No. 3, p. 178; No. 4, p. 236

Use of Electronic Image Intensification in Cinéfluorography
JOHN H. TOLAN AND JOSEPH L. DE CLERK No. 3, p. 154

Use of Principal-Component Description of *D*-log *E* Curves in a Study of the ASA-DIN Speed Relationships
J. L. SIMONDS No. 4, p. 210

AUTHOR INDEX

ALLETAG, G. C.
The Degradation of Phenidone in Developer Solutions During Storage No. 4, p. 213

ALTMAN, J. H., AND LAMBERTS, R. L.
Neutral Image Tones with Kodak High Resolution Plates No. 3, p. 160

BALLARD, A. E., PRZYBYLOWICZ, E. P., AND ZUEHLKE, C. W.
An Evaluation of the Crabtree-Ross Procedure for Residual Hypo in Processed Film No. 3, p. 148

———, ZUEHLKE, C. W., AND MILLER, R. S.
Internal Gelatin in Photographic Silver Halide Grains No. 4, p. 186

BARTLESON, C. J.
Influence of Observer Adaptation on the Acceptance of Color Prints No. 1, p. 32

BLACKMER, L. L., AND MARCHANT, J. C.
System Analysis and Performance of a Feedback Scanning Printer No. 4, p. 225

BRILL, ROBERT H., AND VAN DER MEULEN, P. A.
Sensitization of Mercurous Oxalate by Dyes No. 3, p. 121

CLARK, WALTER
Louis-Philippe Clerc (a citation) No. 4, p. 185

COLTON, E. K., AND WIEGAND, E. J.
Moisture in Photographic Film and Its Measurement No. 3, p. 170

DAVIS, P.
Note on *Internal Gelatin in Photographic Silver Halide Grains* No. 4, p. 190

DE CLERK, JOSEPH L., AND TOLAN, JOHN H.
The Use of Electronic Image Intensification in Cinéfluorography No. 3, p. 154

FUTAKI, KIYOSHI, AND OH-YAMA, YASUSHI
Physical Ripening of Silver Chloride Suspensions No. 3, p. 128

GARFIELD, JOHN F.
Apparatus and a Laboratory for Processing Thick Nuclear Track Emulsions No. 2, p. 85

GRIMM, R. E.
Color Response of Current Amateur Reversal Color Films to Three Electronic Flash Units No. 1, p. 40

HARIHARAN, P.
The Production of Precision Resolving Power Test Reticles No. 2, p. 77

HENN, R. W., AND HUGHES, K. R.
A Sensitometric Processing Machine Using Small Film Strips and Small Developer Volume No. 2, p. 81

HIGGINS, GEORGE C., AND PERRIN, FRED H.
The Evaluation of Optical Images No. 2, p. 66

HOWELL, HUTSON K.
Photographic Emulsions for Missile Photography No. 2, p. 95

HUGHES, K. R., AND HENN, R. W.
A Sensitometric Processing Machine Using Small Film Strips and Small Developer Volume No. 2, p. 81

JAMES, T. H.
Review of *Photographic Sensitivity*, Tokyo Symposium No. 4, p. 234

JONES, R. CLARK
On the Quantum Efficiency of Photographic Negatives No. 2, p. 57

———, On the Minimum Energy Detectable by Photographic Materials

Part II. Results for Four Current Kodak Films No. 4, p. 191
Part III. Energy Incident on a Microscopic Area of the Film No. 4, p. 198

KAPRELIAN, E. K.
Review of *Concepts of Classical Optics*, by John Strong No. 3, p. 177
———, Review of *Detection and Measurement of Infrared Radiation*, by Smith, Jones, and Chasmar No. 4, p. 234
———, Review of *Reproduction of Colour*, by R. W. G. Hunt No. 4, p. 235

KRAUSE, PETER
Notes from the Editor No. 2, p. 119

LAMBERTS, R. L., AND ALTMAN, J. H.
Neutral Image Tones with Kodak High Resolution Plates No. 3, p. 160

LEVY, MARILYN
Combined Development and Fixation of Photographic Images with Monobaths No. 3, p. 136

LIGDA, MYRON G. H., AND SULLIVAN, JAMES D.
Photographic Techniques in Radar Meteorology No. 1, p. 1

LOVE, SAMUEL L.
Some Simplified Shutter, Flash Synchronization, and Motion-Picture Camera Tests No. 4, p. 219

MARCHANT, J. C., AND BLACKMER, L. L.
System Analysis and Performance of a Feedback Scanning Printer No. 4, p. 225

MEERKÄMPER, BEAT
Quantitative Estimation of Photographic Kink Susceptibility No. 4, p. 231

MILLER, R. S., ZUEHLKE, C. W., AND BALLARD, A. E.
Internal Gelatin in Photographic Silver Halide Grains No. 4, p. 186

MORRISON, C. A., AND WHITE, W. E.
An Analytical Recording Densitometer No. 3, p. 164

OH-YAMA, YASUSHI, AND FUTAKI, KIYOSHI
Physical Ripening of Silver Chloride Suspensions No. 3, p. 128

ORLANDO, CARL
Projection of Photographic Data Recording Two-Tenths Second After Exposure No. 3, p. 142

PERRIN, FRED H., AND HIGGINS, GEORGE C.
The Evaluation of Optical Images No. 2, p. 66

PONTIUS, R. B., AND WENRICH, J. A.
Measurement of the Ratio of Lateral to Vertical Dye Diffusion Rates in Swollen Gelatin Coatings No. 3, p. 131

PRZYBYLOWICZ, E. P., ZUEHLKE, C. W., AND BALLARD, A. E.
An Evaluation of the Crabtree-Ross Procedure for Residual Hypo in Processed Film No. 3, p. 148

SEYMOUR, EDGAR D.
A Continuous Rapid-Processing System for Side-Looking Radar Mapping No. 2, p. 91

SIMONDS, J. L.
A Revision of the Relation Between American Standard Exposure Index and DIN Speed Resulting from a Recent Revision of the German DIN 4512 Standard No. 3, p. 162
———, Ana'ysis of the Variability Among Density-Log Exposure Curves of the Black-and-White Negative Films by the Method of Principal Components No. 4, p. 205
———, The Use of Principal-Component Description of *D*-log *E* Curves in a Study of the ASA-DIN Speed Relationships No. 4, p. 210

SMITH, FRANK
Technicalia Photographica No. 1, p. 43; No. 2, p. 105; No. 3, p. 178; No. 4, p. 236.
———, Review of *Microphotography*, by G. W. W. Stevens No. 3, p. 177

SULLIVAN, JAMES D., AND LIGDA, MYRON G. H.
Photographic Techniques in Radar Meteorology No. 1, p. 1

TOLAN, JOHN H., AND DE CLERK, JOSEPH L.
The Use of Electronic Image Intensification in Cinéfluorography No. 3, p. 154

VAN DER MEULEN, P. A., AND BRILL, ROBERT H.
Sensitization of Mercurous Oxalate by Dyes No. 3, p. 121

WENRICH, J. A., AND PONTIUS, R. B.
Measurement of the Ratio of Lateral to Vertical Dye Diffusion Rates in Swollen Gelatin Coatings No. 3, p. 131

WHITE, W. E., AND MORRISON, C. A.
An Analytical Recording Densitometer No. 3, p. 164

WIEGAND, E. J., AND COLTON, E. K.
Moisture in Photographic Film and Its Measurement No. 3, p. 170

WIGHTMAN, E. P.
Photographic Exposure Guides and Meters
Part I — Introduction No. 1, p. 14
Part II — Exposure Tables, Charts, and Calculators No. 1, p. 19

YAMADA, KOGORO
Japanese Photographic Objectives for Use with 35mm Cameras No. 1, p. 6

ZAPPERT, ROBERT H.
Patent Postscripts No. 1, p. 55; No. 2, p. 120

ZUEHLKE, C. W., PRZYBYLOWICZ, E. P., AND BALLARD, A. E.
An Evaluation of the Crabtree-Ross Procedure for Residual Hypo in Processed Film No. 3, p. 148

———, BALLARD, A. E., AND MILLER, R. S.
Internal Gelatin in Photographic Silver Halide Grains No. 4, p. 186